APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,924	11/09/2001	Glenn Christopher Arnold	13187/4	1796

7590   01/13/2009

KATTEN MUCHIN ZAVIS
Attention: Patent Administrator
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Chicago, IL 60661-3693

EXAMINER
BAIG, SAHAR A

ART UNIT	PAPER NUMBER
2424	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,9 and 11-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 9, 11-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-5, 9, and 11-30 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1 and 16-30 rejected under 35 U.S.C. 103(a) as being unpatentable over

Wistendahl et al. US Patent Publication No. 2002/0056136 in view of Sabat et al.,

"Cluster-based smoothing for MPEG-based video on demand systems", 4/2001, IEEE,

p. 339-346.

Regarding Claim 1 and 22, Wistendahl discloses a real time interactive video

system (Fig. 3) comprising a server for storing a sequence of frames of video

content (Para 32), said server also for separately storing separate linked video

files which are not embedded in the video content (Para 33), each linked video file comprising (i) a pixel object file which identifies identify the frame and location within the frame of a selected pixel object objects in said frame and at least one subsequent frame frames(Para 32, 33,76), and (ii) a data object file separate from but linked to said pixel object file, said data object file including data corresponding to the selected pixel object (Fig. 2; Para 33) wherein said linked video file is files are configured to be exportable to a media player (Para 32) so that a location in said sequence of video frames selected by a pointing device during playback (Para 76) of the video frames can be linked with the data object objects when said selected location corresponds to the selected pixel object said pixel objects (abstract; Para 33); and wherein said video linking system samples said video content using a compression technique (i.e. video compression via MPEG-2; the system is deliverable to cable) (Para 52, 55, 63).

Wistendahl fails to specifically disclose at a sample rate which is a divisor multiple of plural standard playback rates.

Sabat discloses wherein said video linking system samples said video content at a sample rate which is a divisor multiple of plural standard playback rates (abstract).

It would have been obvious to one of skill in the art to include Sabat's video linking system samples said video content at a sample rate which is a divisor multiple of plural standard playback rates with the method of Wistendahl because discloses the use of MPEG-2 compression standard to compress the video

frames, where MPEG compression is used when clustering frames to reduce
bandwidth.

One of skill in the art would have been motivated to include Sabat's video linking
system samples said video content at a sample rate which is a divisor multiple of
plural standard playback rates with the method of Wistendahl for the benefit of
improving frame transmission.

Claims 16, 17, 18, 23, 29, 30, Wistendahl discloses wherein said video linking
system samples said video content at a sample rate (Para 51,52).

Wistendahl fails to disclose sampling video content at a sample rate of a divisor
multiple of 30 frames per second and 12 frames per second, which Sabat
discloses (abstract; p. 343, col. 1, sec. 3.3 "smoothing... at 3 frames"; p. 343, col.
2, Para 4). It would have been obvious to one of skill in the art to include Sabat's
sample rate which is a divisor multiple of 30 frames per second and 12 frames
per second with the method of Wistendahl because discloses the use of MPEG-2
compression when clustering frames to reduce bandwidth, which Sabat suggests
clustering with 2, 3, and 6 frames, where 3 is a divisor of both 30 and 12. One of
skill in the art would have been motivated to include Sabat's sample rate which is
a divisor multiple of 30 frames per second and 12 frames per second with the
method of Wistendahl for the benefit of improving frame transmission.

Claims 19, and 24-26, Wistendahl discloses wherein said video linking system samples said video content at a sample rate of a divisor multiple of NTSC and movie frame rates (Para 52, 55, 62).

Claims 20 and 27, Wistendahl discloses clustering frames (Para 51, 52). Wistendahl fails to disclose said sample rate is at least 3 frames per second, which Sabat discloses (abstract; p. 343, col. 1, sec. 3.3 "smoothing... at 3 frames"; p. 343, col. 2, Para 4). It would have been obvious to one of ordinary skill in the art at the time of invention to include Sabat's rate is at least 3 frames per second with the method of Wistendahl because Wistendahl discloses clustering of frames using a statistical method is known, wherein clustering is performed over a number of sequential frames, for example 3. One of skill in the art would have been motivated to include Sabat's rate is at least 3 frames per second with the method of Wistendahl for the benefit of improving frame transmission.

Regarding claim 21 and 28, Wistendahl discloses said video linking system clustering the sampled video content with plural frames per cluster (Para 51), as does Sabat (abstract; p. 343, col. 1, sec. 3.3 "smoothing... at 3 frames"; p. 343, col. 2, Para 4).

5.   Claim 2, 4, and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over

Wistendahl et al. US Patent Publication No. 2002/0056136 in view of Sabat et al.,

"Cluster-based smoothing for MPEG-based video on demand systems", 4/2001, IEEE,

p. 339-346 in further view of Gerba US Patent No. 5,931,908.

        Regarding Claim 2, the combined system of Wistendahl and Sabat fail to teach

        the limitation of a timing device for providing timing signals to said server. In an

        analogous art Gerba discloses providing timing signals to said server (Fig. 1 item

        12), said timing signals being synchronized to a real time broadcast of said video

        content, wherein said timing signals comprise time stamps (col. 4 lines 56-64,

        sequential code col 5 lines 5-15 and col. 6 lines 62-65).

        It would have been obvious to one of ordinary skill in the art to modify Wistendahl

        and Sabat's system to include the timing signals which are time code numbers,

        as taught by Gerba, for the advantage of providing a way for the video buffer to

        keep track of a users current position in a program when the user desires to stop

        the program and come back at a later time and resume the program from their

        last position with in the program.

        As for claim 4, Gerba discloses a real time interaction system wherein the timing

        signals are time code numbers (see claim 2).

Dealing with claim 5, Gerba discloses a real time interaction system wherein the

video frames are stored by time code number (see claim 2).

6.   Claim 3, 9, 11, 12, 14, and 15 rejected under 35 U.S.C. 103(a) as being

unpatentable over Wistendahl et al. US Patent Publication No. 2002/0056136 in view of

Sabat et al., "Cluster-based smoothing for MPEG-based video on demand systems",

4/2001, IEEE, p. 339-346 in further view of Gerba US Patent No. 5,931,908 in further

view of Berbert US Patent Publication No. 2003/0226150.

Regarding Claim 3, the combined system as disclosed above fails to disclose

that video frames are stored sequentially in a video buffer. In an analogous art,

Berberet discloses the real time interaction system wherein the video frames are

stored sequentially in a video buffer (2.2, 2.2.1 Fig. 2a and paragraph 0131 lines

7-18). It would have been obvious to one of ordinary skill in the art to combine

the teachings of Wistendahl, Sabat, Gerba and Berbert to devise a system that is

capable of storing sequential video frames for the convenience of the user.

Regarding claim 9, Berberet discloses the real time interaction system wherein

the viewer interaction platform (1.3 Fig. 2) includes a local storage device (2.9

Fig. 2) for storing user selected video frames (paragraph 128).

As for claim 11, Berberet discloses the real time interaction system as recited in

claim 9, wherein the viewer frame interaction application (1.3 Fig. 2) is configured

to support one or more local frame advance navigational buttons (Local VCR,

paragraph 128 lines 8-.12, a VCR inherently supports frame advance

navigational buttons).

Dealing with claim 12, Berberet discloses the real time interaction system

wherein the frame interaction application (1.3 Fig. 2) is configured to support a

frame advance dialog box which allows unselected frames on the server (2.2 Fig.

2) to be called on a time interval basis (the video buffer allows the user to

perform the same functions as if they were using a VCR which shows how this

invention is configured to support a frame advance dialog box stated above,

paragraph 86).

Considering claim 14, Berberet discloses the real time interaction system

wherein the viewer interaction application (1.3 Fig. 2) is configured to support

one or more server frame advance navigational buttons for viewing unselected

frames in the server (paragraph 123, paragraph 125 lines 1- 7, and [Remote

Control] table 1 page 13).

With respect to claim 15, Berberet discloses the real time interaction system

wherein the viewer interaction application supports a graphical user interface
(paragraph 123 lines 7-11).

7.   Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl
et al. US Patent Publication No. 2002/0056136 in view of Sabat et al., "Cluster-based
smoothing for MPEG-based video on demand systems", 4/2001, IEEE, p. 339-346 in
further view of Gerba US Patent No. 5,931,908 in further view of Berbert US Patent
Publication No. 2003/0226150 in further view of Gupta (US2005/0086703A1).

As for claim 13, the combined system of Wistendahl, Sabat, Gerba, and Berbert
fails to specifically teach the real time interaction system wherein the viewer
frame interaction application is configured to support a drop down menu for
selecting time intervals.
In an analogous art, Gupta discloses a real time.interaction system wherein the
viewer frame interaction application (100 Fig. 4) is configured to support a drop
down menu for selecting time intervals (paragraph 71).
It would have been obvious to one of ordinary skill in the art to modify the
combined system of Wistendahl, Sabat, Gerba, and Berbert to include the viewer
frame interaction application configured to support a drop down menu for
selecting time intervals, as taught by Gupta, for the advantage of allowing, users
to search through program content by using the on screen display with would
reduce the complexity of the hand held remote control.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. It includes Sezan et al. US Patent No. 7,178,107.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-

3005. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art
Unit 2424

SB